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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/772,355

02/06/2004

Tatsuki Nogiwa

2004-0179A

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

GRAYBILL, DAVID E

ART UNIT

PAPER NUMBER

2822

MAIL DATE

DELIVERY MODE

06/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/772,355

Applicant(s)

NOGIWA ET AL.

Examiner

David E. Graybill

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-24, 27-30, 32 and 38-44 is/are pending in the application.
- 4a) Of the above claim(s) 18-24 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30, 32, 38-40 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

In the rejections infra, generally, reference labels are recited only for the first recitation of identical claim elements.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27-29, 38, 42 and 44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kuhns (20040119593).

At paragraphs 28-33, 40-45, 52, 56 and 65 Kuhns discloses the following:

A substrate holder for holding a circuit board, comprising: a main body "liner"; and a holding surface formed on the main body for allowing a circuit board 10 to adhere to the holding surface, wherein the holding surface includes: a first adhesive 19a holding region for holding the circuit board with a first tackiness ("permanently tacky" and "adhesive strength"); and a second adhesive 19b holding region for holding the circuit board with a second tackiness which is different from the first tackiness, said first and second adhesive holding regions being coplanar and capable of holding the

circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body; and wherein the first adhesive holding region and the second adhesive holding region have different surface coarseness; an adhesive material 19a, 19b provided on said main body, said first adhesive holding region and said second adhesive holding region being on a surface of said adhesive material; wherein the first adhesive holding region and the second adhesive holding region are within one area of the adhesive material on said main body; wherein the first tackiness is less than the second tackiness and the second adhesive holding region is confined within the first adhesive holding region; wherein the holding surface comprises a plurality of sets of the first adhesive holding region and the second adhesive holding region ("at least two different portions 19a, 19b with varying adhesive strengths" and "any number of different portions of adhesives with differing or similar adhesive strengths").

A pallet for carrying a circuit board comprising: a main body; and a holding surface formed on the main body for allowing a circuit board to adhere to the holding surface, wherein the holding surface includes: a first adhesive holding region for holding the circuit board with a first tackiness; and a second adhesive holding region for holding the circuit board with a second tackiness which is different from the first tackiness, said first and

second adhesive regions being coplanar and capable of holding the circuit board in cooperation; wherein the first adhesive holding region and the second adhesive holding region are arranged parallel to the surface of said main body; and wherein the first adhesive holding region and the second adhesive holding region have different surface coarseness.

To further clarify the disclosure wherein the first adhesive holding region and the second adhesive holding region have different surface coarseness, it is noted that at least 12, 34, 36 and 38 impart different surface coarseness to the first and second regions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 29 supra, and further in combination with Otaki (20030059565).

As cited, Kuhns discloses wherein the first adhesive holding region and the second adhesive holding region have different surface undulation characteristics imparted by 12, 34, 36 and 38.

However, Kuhns does not appear to explicitly disclose wherein the first adhesive holding region and the second adhesive holding region are composed of the same adhesive material.

Nonetheless, at paragraphs 183-186, 189, and 456-459, Otaki discloses wherein a first adhesive and a second adhesive having different tackiness "adhesive strengths" are composed of the same adhesive material "adhesive common to two adhesives is provided as a main component . . . and a tackifier resin added to the pressure-sensitive adhesive are varied to create an adhesive strength different between the two adhesives." Moreover, it would have been obvious to combine this disclosure of Otaki with the disclosure of Kuhns because it would facilitate provision of the first and second adhesives having the first and second tackinesses of Kuhns.

Furthermore, as cited, Kuhns discloses "two different adhesives." In addition, as cited, Otaki discloses that two different adhesives "different pressure-sensitive adhesives having different adhesive strengths" and "a first adhesive and a second adhesive having different tackiness are composed of the same adhesive material" are alternatives and equivalents; therefore, as reasoned from well established legal precedent, it would have been obvious to substitute or combine the same adhesive material of Otaki for or with the two different adhesives of Kuhns. See *In re May* (CCPA) 136 USPQ 208 (It is our opinion that the substitution of Wille's type seal for the

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cement of Hallauer in Figure 1 would be obvious to persons of ordinary skill in the art from the disclosures of these references, merely involving an obvious selection between known alternatives in the art and the application of routine technical skills.); In re Cornish (CCPA) 125 USPQ 413; In re Soucy (CCPA) 153 USPQ 816; Sabel et al. v. The Wickes Corporation et al. (DC SC) 175 USPQ 3; Ex parte Seiko Koko Kabushiki Kaisha Co. (BdPatApp&Int) 225 USPQ 1260; and Ex parte Rachlin (BdPatApp&Int) 151 USPQ 56. See also Smith v. Hayashi, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted). "For example, where a claimed apparatus requiring

Phillips head screws differs from a prior art apparatus describing the use of flathead screws, it might be hard to find motivation to substitute flathead screws with Phillips head screws to arrive at the claimed invention.

However, the prior art would make it more than clear that Phillips head screws and flathead screws are viable alternatives serving the same purpose. Hence, the prior art would 'suggest' substitution of flathead screws for Phillips head screws albeit the prior art might not 'motivate' use of Phillips head screws in place of flathead screws. Ex parte Jones, 62 USPQ2d 1206 (BdPatApp&Int 2001). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960); Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 27, and further in combination with Nishikawa (07074497).

As cited supra, Kuhns discloses wherein an inherent air outlet (the second adhesive region) is provided in the second adhesive region.

To further clarify, the language "air outlet" is a statement of intended use of the adhesive region that does not appear to result in a structural difference between the claimed adhesive region and the adhesive region of Kuhns. Further, because the adhesive region of Kuhns appears to have the same structure as the claimed adhesive region, it appears to be capable of

being used for the intended use, and the statement of intended use does not patentably distinguish the claimed adhesive region from the adhesive region of Kuhns. The manner in which a product operates is not germane to the issue of patentability of the product; Ex parte Wikdahl 10 USPQ 2d 1546, 1548 (BPAI 1989); Ex parte McCullough 7 USPQ 2d 1889, 1891 (BPAI 1988); In re Finsterwalder 168 USPQ 530 (CCPA 1971); In re Casey 152 USPQ 235, 238 (CCPA 1967). Also, "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim."; Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). And, "Inclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims."; In re Young, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 136 USPQ 458, 459 (CCPA 1963)). And, claims directed to product must be distinguished from the prior art in terms of structure rather than function. In re Danley, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does [or is intended to do]." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). In any case, although Kuhns does not appear to explicitly disclose the process limitation, "wherein an air outlet is provided in the second adhesive region," this process limitation does not structurally limit the product of Kuhns, and the product of Kuhns could be made by the

process. To further clarify, the process does not limit the product to any particular structure, such as an air outlet because the scope of the claims encompasses provision of intermediate structure which is not necessarily present in the final product. For example, the transitional claim language "comprising" is inclusive of additional process steps such as a process of removing the air outlet so that the air outlet is not present in the claimed product or in the product of Kuhns.

However, Kuhns does not appear to explicitly disclose wherein a through hole for receiving a pin is in the first adhesive region, the through hole being usable by the pin for peeling off the circuit board.

Notwithstanding, in the English translation, abstract and drawings, Nishikawa discloses a wherein a through hole 4 for receiving a pin 5 is in the first adhesive region 3, the through hole being usable by the pin for peeling off the circuit board 2. Moreover, it would have been obvious to combine this disclosure of Nishikawa with the disclosure of Kuhns because it would facilitate release of the release liner of Kuhns.

In the alternative, claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 39, and further in combination with Mikami (20030178124).

Kuhns does not appear to explicitly disclose wherein an air outlet is provided in the second adhesive region.

Still, at paragraphs 5, 27, 43, 44, 70 and 72, Mikami discloses wherein an air outlet 24 is provided in an adhesive region 18. Moreover, it would have been obvious to combine this disclosure of Mikami with the disclosure of Kuhns because it would provide egress for trapped air.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhns as applied to claim 28, and further in combination with Suzuki (6110595).

Kuhns does not appear to explicitly disclose wherein the adhesive material comprises silicone rubber, polyurethane rubber or fluorine rubber.

Regardless, at column 5, lines 59 to 67, Suzuki discloses wherein an adhesive material comprises silicone rubber. In addition, it would have been obvious to combine this disclosure of Suzuki with the disclosure of Kuhns because it would facilitate provision of the rubber pressure sensitive adhesive of Kuhns.

The art made of record and not applied to the rejection is considered pertinent to applicant's disclosure. It is cited primarily to show inventions relevant to the examination of the instant invention.

For information on the status of this application applicant should check PAIR:

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Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.

Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours:

Monday through Friday, 8:30 a.m. to 6:00 p.m.

The fax phone number for group 2800 is (571) 273-8300.



David E. Graybill
Primary Examiner
Art Unit 2822

D.G.

9-Jun-07